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(54) RECEIVER SYSTEM

(57)Abstract:

PROBLEM TO BE SOLVED: To extract a part or the whole of received data in consideration of data attributes of received data and the empty capacity in a storage medium to store and preserve extracted data in the storage medium.

SOLUTION: A storage data determination function which has the empty capacity in a storage and preservation means 14, which an empty capacity acquisition means 19 acquires, and data attributes of received data, which are included in received data, as parameters is used to determine a part to be extracted of data, which is received by a reception means 10, by a storage level determination means 12, and a data extraction means 13 extracts an extraction part from received data based on the determination of the means 12, and a data write means 15 stores and preserves extracted data in a

storage and preservation means 14.

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CLAIMS

[Claim(s)]
[Claim 1] A receiving means to receive the 1st data, and an are recording preservation means by which are recording preservation of said a part of 1st data [at least] is carried out, An empty capacity acquisition means to acquire the empty capacity of said are recording preservation means, and an are recording level decision means to determine the 2nd data which should be stored in said are recording preservation means among said 1st data received by said receiving means, A data extraction means to extract the 2nd data from said 1st data based on the decision of said are recording level decision means, It has the data write-in means which writes said 2nd data extracted by said data extraction means in said are recording preservation means. Said are recording level decision means Said parameter is a receiving set which

contains said empty capacity at least including an are recording data decision means to determine said 2nd data based on a predetermined parameter.

[Claim 2] For said parameter, said 1st data is a receiving set according to claim 1 which includes said data attribute further including a data attribute.

[Claim 3] It is the receiving set according to claim 1 with which said receiving set is further equipped with a User Information storage means to memorize the information about the user of said 2nd data as User Information, and a User Information acquisition means to acquire User Information from said User Information storage means, and said parameter includes said User Information further.

[Claim 4] A receiving means to receive the 1st data including a data attribute, and an are recording preservation means by which are recording preservation of said a part of 1st data [at least] received by said receiving means is carried out, The date management tool which manages the date, and an are recording level decision means to determine the 2nd data which should be stored in said are recording preservation means among said 1st data received by said receiving means, A data extraction means to extract said 2nd data from said 1st data based on the decision of said are recording level decision means, It has the data write-in means which writes said 2nd data extracted by said data extraction means in said are recording preservation means. Said are recording level decision means Based on a predetermined parameter, said parameter is a receiving set which contains said data attribute and said date at least including an are recording data decision means to determine said 2nd data.

[Claim 5] It is the receiving set according to claim 4 with which said receiving set is further equipped with an empty capacity acquisition means to acquire the empty capacity of said are recording preservation means, and said parameter contains said empty capacity further.

[Claim 6] It is the receiving set according to claim 5 with which said receiving set is further equipped with a User Information storage means to memorize the information about the user of said 2nd data as User Information, and a User Information acquisition means to acquire User Information from said User Information storage means, and said parameter includes said User Information further.

[Claim 7] Said User Information is a receiving set containing the taste degree-of-concentration flag which shows whether a user's taste concentrates on a specific field according to claim 3 or 6.

DETAILED DESCRIPTION

[Detailed Description of the Invention]

[0001]

[Field of the Invention] About the receiving set of data, especially this invention filters the received data, extracts some or all of data that was received, and relates to a storage at the receiving set which carries out are recording preservation.
[0002]
[Description of the Prior Art] Research and development in the receiving set with which a user receives and manages data, such as a document, an image, and voice, through a network or an electric wave is done with the spread of networks, such as the Internet, or researches and developments of digital broadcasting. In this kind of receiving set, data are received automatically, and it saves at a storage, and a user processes the saved data at the time of day of arbitration, and uses them. In such a receiving set, in case the received data are saved at a storage, the whole data is saved, without taking into consideration about the capacity of the received data, and the empty capacity of a storage. Therefore, a user has to spend an effort on the actuation to a receiving set as it is as performing setting out for reservation of reception of data **** [and], so that favorite their own data can certainly be saved. [arranging the content memorized by the storage] Moreover, when data were transmitted by a failure, a reservation actuation failure, failure of filing of a storage, etc., there was a problem of it becoming impossible to save data important for oneself.
[0003] Although it is a different technical field, the equipment which saves data in consideration of the empty capacity of a storage is indicated by JP,8-339385,A. The equipment currently indicated by the official report concerned is information retrieval equipment, by filtering the data which search a database and are obtained based on the utilization situation of the already memorized data to a user's empty capacity of a storage and storage, thinned out the data of a retrieval result and has memorized them to the storage. Filtering classified gradually the sum total capacity of the data which digested by carrying out elimination etc., after the user used data for the empty capacity and the specific period of a storage, and it has determined the capacity per affair of the data to save by to which partition the empty capacity of a storage and the sum total capacity of the digested data belong. The data specifically saved when the empty capacity of a storage or the sum total capacity of the digested data is 0-100 K bytes are condition of having [in the case of 100 bytes / one affair, and 100 K bytes - 1 M byte / in the case of 500 bytes / one affair, and 1 M byte - 5 M bytes] no filtering in the case of 1 M byte / one affair, and 5 M bytes or more.
[0004]
[Problem(s) to be Solved by the Invention] However, for text data obtained as a result of retrieval, such as document information and a newspaper article, by preparedness, the information retrieval equipment currently indicated by JP,8-339385,A operates the text data [lack / informational] according to the empty capacity of a storage on a curtailed schedule, and is saved. On the other hand, in digital broadcasting, about a certain content of information, different expression means, such as text data, voice

data, and image data, express, respectively, and information is transmitted combining these different expression means. Therefore, the technique currently indicated by JP,8-339385,A is uncombinable with the network and digital transceiver system by which not only text data but voice data, image data, etc. are dealt with.

[0005] Moreover, it can be said that the data which it is going to save with information retrieval equipment at a storage are data which the user itself searched, and the data obtained as a result of retrieval are data for which the user is asking to some extent. Therefore, efficient utilization of a storage is expectable with the technique currently indicated by the official report concerned.

[0006] In the receiving set which, on the other hand, receives data, such as text data by which digital broadcasting is carried out, image data, and voice data, through a network or an electric wave, data are transmitted regardless of a demand of a user.

[0007] Therefore, when the data by which digital broadcasting is temporarily carried out in the technique currently indicated by JP,8-339385,A are applied to the receiving set received through a network or an electric wave, even if it is data of what kind of content, it saves with the uniform data volume according to empty capacity, and the problem of occupying much capacity of a storage for a user in spite of the data which are not important occurs. Moreover, as a result, there is also a problem that the situation where it can save only with small data volume about important data for a user may happen. Furthermore, since the preservation capacity of data is determined according to the capacity of the data digested at a fixed period with a user, when there is little amount of data which the user digested within a fixed period, the problem that it can save only with small data volume even if it is data important for a user occurs.

[0008] This invention is made so that it may cancel the above-mentioned technical problem, and it offers the receiving set which can are recording save the higher data of a user's satisfaction level by extracting a part or the whole of data which received with the receiving set, and memorizing it to a storage in consideration of the empty capacity of a user's taste or a storage.

[0009]

[Means for Solving the Problem] A receiving means by which the receiving set of this invention receives the 1st data, and an are recording preservation means by which are recording preservation of said a part of 1st data [at least] is carried out, An empty capacity acquisition means to acquire the empty capacity of said are recording preservation means, and an are recording level decision means to determine the 2nd data which should be stored in said are recording preservation means among said 1st data received by said receiving means, A data extraction means to extract the 2nd data from said 1st data based on the decision of said are recording level decision means, It has the data write-in means which writes said 2nd data extracted by said data extraction means in said are recording preservation means. Said are recording

level decision means Including an are recording data decision means to determine said 2nd data based on a predetermined parameter, said parameter contains said empty capacity at least, and the above-mentioned technical problem is solved by this.

[0010] In said 1st data, said parameter may include said data attribute further including the data attribute.

[0011] Said receiving set may be further equipped with a User Information storage means to memorize the information about the user of said 2nd data as User Information, and a User Information acquisition means to acquire User Information from said User Information storage means, and said parameter may include said User Information further.

[0012] A receiving means to receive the 1st data with which the receiving set of this invention includes a data attribute, An are recording preservation means by which are recording preservation of said a part of 1st data [at least] received by said receiving means is carried out, The date management tool which manages the date, and an are recording level decision means to determine the 2nd data which should be stored in said are recording preservation means among said 1st data received by said receiving means, A data extraction means to extract said 2nd data from said 1st data based on the decision of said are recording level decision means, It has the data write-in means which writes said 2nd data extracted by said data extraction means in said are recording preservation means. Said are recording level decision means Based on a predetermined parameter, including an are recording data decision means to determine said 2nd data, said parameter contains said data attribute and said date at least, and an above-mentioned technical problem is solved by this.

[0013] Said receiving set may be further equipped with an empty capacity acquisition means to acquire the empty capacity of said are recording preservation means, and said parameter may contain said empty capacity further.

[0014] Said receiving set may be further equipped with a User Information storage means to memorize the information about the user of said 2nd data as User Information, and a User Information acquisition means to acquire User Information from said User Information storage means, and said parameter may include said User Information further.

[0015] Said User Information may contain the taste degree-of-concentration flag which shows whether a user's taste concentrates on a specific field.

[0016]

[Embodiment of the Invention] Hereafter, the gestalt of operation of this invention is explained, referring to a drawing.

[0017] (Gestalt [1st / the] of operation) The receiving set of the gestalt of implementation of the 1st of invention concerning this invention is a receiving set which carries out are-recording preservation of a part or the whole of data which received at the storage in which it was prepared inside the receiving set, it faces

determining which carries out are-recording preservation of the received data, and received data carry out in consideration of the empty capacity of the storage which carries out are-recording preservation, and the received data attribute of data. In addition, also when not carrying out are recording preservation of the data received as carrying out are recording preservation to the storage in which a part or the whole of data which received was prepared inside the receiving set, it contains.

[0018] As data to receive, although various things, such as a catalog, a film, event information, and various provided information, can be assumed, in the gestalt of this operation, catalog data are taken up and explained as an example. It is determined are recording preservation of which data item as shown in drawing 2 as an example, the configuration of the catalog data to receive shall be equipped with each data item of the data attribute data 30, the title data 31 of a catalog, the text data 32 of the content of the catalog, voice data 33, and the image data 34, and carries out from from among each of these data items. Furthermore, the data attribute data 30 contain amount-of-information data-division 30a on which the amount of information of each data item by which are recording preservation is carried out was recorded, respectively, as shown in drawing 3 . As each data item included in received data is shown in drawing 2 , label attachment is considered as level 1, level 2, and level 3 -- from a data item with much amount of information at order, and the title data 31 serve as level 1. Hereafter, the phase of are recording level, and a call and are recording level is called an are recording level value for this level. The are recording level value of are recording level 1 is "1."

[0019] In addition, the data to receive may not be restricted to the configuration shown in drawing 2 and drawing 3 , and setting out of a data item, the number of data items, etc. may be changed suitably. Moreover, even if the title data 31 are surely contained in each data, it is good for it.

[0020] Drawing 1 is the block diagram of the receiving set of the gestalt of implementation of the 1st of invention concerning this invention. A receiving means 10 to receive the data with which the receiving set 1 was transmitted from the sending set 2, A function storage means 11 to memorize the are recording data decision function which searches for the information (are recording level value) which shows which data item of the data items included in received data is accumulated, An are recording level decision means 12 to perform processing based on the are recording data decision function memorized by the function storage means 11, and to ask for are recording level, A data extraction means 13 to extract the data of the data item which carries out are recording preservation from received data based on the are recording level value calculated with the are recording level decision means 12, The are recording preservation means 14 which carries out are recording preservation of the extract data which are a part or the whole of received data given by the data extraction means 13, and the are recording preservation means 14 are equipped with

the data write-in means 15 which carries out are recording preservation of the extract data.

[0021] Further, the receiving set 1 investigated the empty capacity of the are recording preservation means 14, and is equipped with an empty capacity acquisition means 19 to give empty capacity to the are recording level decision means 12 as a parameter of an are recording data decision function.

[0022] The empty capacity acquisition means 19 acquires the empty capacity of the storage as an are recording preservation means 14 at the time of receiving data from a sending set 2 for example, per cutting tool.

[0023] The information (are recording level value) which directs the data item of the received data which carries out are recording preservation is searched for by giving the empty capacity of the storage as an are recording preservation means 14 as a parameter to an are recording data decision function. They are the table function as which the output condition over an input is expressed by the table (table) with which a mutual item consists of two or more lists matched mutually as an are recording data decision function, and if. then Although the function with which the output condition over an input is expressed by the else format, and the function as which the output condition over an input is expressed by the general numerical function can be considered, a table function is adopted with the gestalt of this operation. An example of a table function is shown in drawing 4 . The table function of drawing 4 is an amount-of-information function table showing a response with the empty capacity item 51 of the storage as an are recording preservation means 14, and the are recording level value item 52 of received data.

[0024] The data which have the configuration shown in drawing 2 and drawing 3 (a) are memorized as transmit data by storage means 2a as a storage with which the sending set 2 shown in drawing 1 is equipped. Moreover, in the transceiver system of data equipped with a receiving set 1 and a sending set 2, a receiving set 1 receives the transmit data memorized by storage means 2a which a sending set 2 transmits with the receiving means 10, a part or the whole of data which received extracts with the data extraction means 13, and are recording preservation is carried out with the data write-in means 15 at the are recording preservation means 14.

[0025] Next, a procedure after a receiving set 1 receives data using a flow chart until a part or the whole of received data is accumulated in the are recording preservation means 14 is explained.

[0026] Drawing 5 is a flow chart which shows a procedure after the receiving means 10 of a receiving set 1 receives the transmit data memorized by storage means 2a which a sending set 2 transmits until a part or the whole of received data is accumulated in the are recording preservation means 14.

[0027] First, the receiving means of a receiving set 1 receives the transmit data transmitted from the sending set 2 as received data (it is described as step S001 in

drawing, and the following S001).

[0028] The receiving means 10 extracts the data attribute data 30 (drawing 2) from received data, and gives them to the are recording level decision means 12 (S002).

[0029] Next, the empty capacity acquisition means 19 investigates the empty capacity of the are recording preservation means 14 as a storage, and gives empty capacity to the are recording level decision means 12 as a parameter of an are recording data decision function (S003).

[0030] Next, the information (are recording level value) which shows which part of the received data is accumulated is searched for by the are recording level decision means' 12 acquiring an amount-of-information function table (drawing 4) from the function storage means 11 as an are recording data decision function, and searching an amount-of-information function table by making empty capacity of the are recording preservation means 14 into a parameter (S004).

[0031] When the empty capacity of the storage means 14 is "0 bytes or more less than 100 K bytes" by searching an amount-of-information function table, an are recording level value "1" In the case of "100 K bytes or more less than 1 M byte", in the case of "1 M bytes or more less than 5 M bytes", an are recording level value "1, 2, 3" is calculated, and, in the case of "5 M bytes or more", an are recording level value "1, 2, 3, 4" is calculated for an are recording level value "1, 2", respectively. In addition, when there is less empty capacity of the storage means 14 than total of the amount of information of each data item corresponding to the calculated are recording level value, the are recording level decision means 12 outputs an are recording level value as "0." An are recording level value is applied when the are recording level decision means 12 to an are recording level value "0" is outputted for the case where amount of information has less 25byte) and empty capacity than 25 bytes, from (drawing 3 (b) by "1."

[0032] When the are-recording level value which can be found from an are-recording data decision function is not "0" (i.e., when accumulating some received data [at least] in the are-recording preservation means 14), Yes) and the are-recording level decision means 12 give the are-recording level value calculated from an are-recording data decision function to the data-extraction means 13, and a data-extraction means 13 extracts a part or the whole of reception and received data based on an are-recording level value for received data from a receiving means 10 by (S 005 (S006). In addition, processing is ended without performing are recording preservation of the received data to No) and the are recording preservation means 14 by (S005, when an are recording level value is "0."

[0033] Next, the data extraction means 13 gives the extract data extracted from received data to the data write-in means 15, and the data write-in means 15 writes extract data in the are recording preservation means 14, and it performs are recording preservation (S007).

[0034] Thus, with the procedure of step S001 to the step S007, a receiving set 1 carries out are recording preservation of some or all of data that was received at the are recording preservation means 14.

[0035] In addition, the gestalt of operation may be changed not only in an above-mentioned thing but variously. For example, although it serves as setting out in which many data items are accumulated as much as possible within a limit of empty capacity, even if it changes the information function table shown in drawing 4 to this and it is a small number of data item, it is good also as setting out which accumulates a data item with as much as possible much amount of information.

[0036] Since according to the receiving set of the above configuration the text memorized for an are recording preservation means, voice, and the data with which classes differ like an image are chosen based on the empty capacity of an are recording preservation means and are recording preservation is carried out Although it cannot save at all since the information on a content required for a user is not settled in empty capacity, or there is empty capacity of enough, it cannot say that only inadequate data can be saved and the capacity of a storage means can be utilized effectively.

[0037] (Gestalt of the 2nd operation) The receiving set of the gestalt of implementation of the 2nd of invention concerning this invention Are the receiving set which carries out are recording preservation of a part or the whole of data which received at the storage in which it was prepared inside the receiving set, and the storage in which which part of the received data was prepared inside the receiving set is faced whether are recording preservation is carried out determining. The date when receiving the data other than the empty capacity of the storage which carries out are recording preservation of the received data, the data attribute of the received data, and User Information of the user who peruses the received data are taken into consideration. In addition, User Information includes the information that the user-identification child 40, the address data 41, the age data 42, the sex data 43, the occupation data 44, and a user are holding interest, such as a matter (Key-Word data division 45), as shown in drawing 6 . Moreover, also when not carrying out are recording preservation of the data received as carrying out are recording preservation to the storage in which a part or the whole of data which received was prepared inside the receiving set, it contains.

[0038] The data to receive are data about a catalog as well as the gestalt of the 1st operation, and as shown in drawing 7 as an example of the configuration of data, suppose them that it has each data item of the data attribute data 30, the title data 31 of a catalog, the text data 32 of the content of the catalog, voice data 33, and the image data 34. In addition, the class and number of each data items which are contained in received data are not restricted to the example shown in drawing 7 . Although are recording preservation of each data item except the data attribute data

30 is carried out at a storage, in the case of are recording preservation, are recording preservation is carried out in either of the combination of each data item of "the title data 31", "the title data 31 and text data 32", "the title data 31, text data 32 and voice data 33", and "the title data 31, text data 32, voice data 33 and the image data 34." Label attachment is considered as level 1, level 2, level 3, and level 4 -- at order from an item with much amount of information about the combination of each data item, and "the title data 31" serves as level 1. Hereafter, the phase of are recording level, and a call and are recording level is called an are recording level value for this level. The are recording level value of are recording level 1 is "1."

[0039] Moreover, the data attribute data 30 (drawing 7) of received data have composition shown in drawing 8 (a), and the data attribute data 30 have classification data 30b which shows a classification of data, Key-Word data-division 30c showing the content of received data, and amount-of-information data-division 30a which consists of two or more items holding the amount of information in each are recording level of received data. The classification of a catalog, news, event information, etc. is held at classification data 30b. Moreover, the politics as a news genre, economy, a sport, and the name of a country are held [the flea market as a content of event information, an actor name, a theatrical company name, etc.] for Biel as an object of a catalog, and skiwear as Key-Word at Key-Word data-division 30c. In the gestalt of this operation, as shown in drawing 8 (b), the received data to receive are data of the catalog about Biel, a "catalog" is memorized by classification data 30b, "Biel" is memorized by Key-Word section 30c, respectively, and the amount of information of each are recording level is a value shown all over drawing.

[0040] Drawing 9 is the block diagram of the receiving set concerning the gestalt of the 2nd operation. A receiving means 10 to receive the data with which receiving set 1A was transmitted from the sending set 2, A function storage means 11 as a storage to memorize the are recording data decision function for searching for the information (are recording level value) which shows which part of the received data is accumulated, An are recording level decision means 12 to calculate an are recording level value based on the are recording data decision function memorized by the function storage means 11, A data extraction means 13 to extract the part accumulated from received data based on the are recording level value calculated with the are recording level decision means 12, The are recording preservation means 14 and the are recording preservation means 14 as a storage which carries out are recording preservation of the extract data which are a part or the whole of received data given by the data extraction means 13 are equipped with the data write-in means 15 which carries out are recording preservation of the extract data.

[0041] While receiving set 1A manages the User Information storage means 16 and the User Information storage means 16 as a storage which memorizes further User Information of the user who peruses received data While managing a User Information

acquisition means 17 to give User Information to the are recording level decision means 12 as a parameter of an are recording data decision function, and the date in receiving set 1A It has the date management tool 18 which gives the date to the are recording level decision means 12 as a parameter of an are recording data decision function, and an empty capacity acquisition means 19 to investigate the empty capacity of the are recording preservation means 14, and to give empty capacity to the are recording level decision means 12 as a parameter of an are recording data decision function.

[0042] The dates which the date management tool 18 manages are the A.D. year / moon / day expressed for example, in a YYYY/MM/DD format.

[0043] The data configuration of User Information managed with the User Information acquisition means 17 is as having been shown in drawing 6 , and is equipped with the Key-Word data division 45 which are equipped with the user-identification child 40, the address data 41, the age data 42, the sex data 43, and the occupation data 44, in addition consist of two or more items as a data item of User Information. A user's hobby, interest, and Key-Word that shows taste are beforehand set to each item of the Key-Word data division 45 by the user.

[0044] The empty capacity acquisition means 19 acquires the empty capacity of the storage as an are recording preservation means 14 in the event of receiving data for example, per cutting tool.

[0045] The are recording data decision function which outputs the information (are recording level value) which directs the part accumulated of the received data is expressed by two or more table functions as which the output to an input is expressed on the table as the gestalt of the 1st operation explained. An example of a table function is shown in drawing 10 (a) and drawing 10 (b). The table function of drawing 10 (a) is a stage function table showing a response with the moon item 36 judged based on the date given from the date management tool 18, and the are recording level value item 37 of received data. Two or more tables on which the stage function corresponded to the data attribute of received data are prepared beforehand. The table function of drawing 10 (b) is an amount-of-information function table showing a response with the empty capacity item 38 of the storage as an are recording preservation means 14, and the are recording level value item 39 of received data.

[0046] The data of a configuration of being shown in drawing 7 and drawing 8 (b) are memorized as transmit data by storage means 2a with which a sending set 2 is equipped, as shown in drawing 9 . Moreover, a data write-in means 15 carries out are-recording preservation to an are-recording preservation means 14 in the extract data which extracted a part or the whole of data which receiving set 1A received the transmit data memorized by storage means 2a which a sending set 2 transmits in the transceiver system equipped with receiving set 1A and a sending set 2 with a receiving means 10, and a data-extraction means 13 received based on the decision

of the are-recording level decision means 12, and a data-extraction means 13 extracted.

[0047] Next, the procedure of determining the part which performs a procedure after receiving set 1A receives data until it accumulates a part or the whole of received data in the are recording preservation means 14, and are recording preservation of the data which the are recording level decision means 12 received using the are recording data function is explained using a flow chart.

[0048] Drawing 11 is a flow chart which shows a procedure after receiving the transmit data memorized by storage means 2a which a sending set 2 transmits by receiving set 1A until are recording preservation of a part or the whole of received data is carried out at the are recording preservation means 14.

[0049] First, the receiving means of receiving set 1A receives the transmit data transmitted from the sending set 2 as received data (it is described as step S101 in drawing, and the following S101).

[0050] The receiving means 10 extracts the data attribute data 30 (drawing 8 (b)) from received data, gives them to the are recording level decision means 12, and the are recording level decision means 12 extracts Key-Word from Key-Word data-division 30c contained in the data attribute data 30, and it gives it to the User Information acquisition means 17. The User Information acquisition means 17 searches User Information (the Key-Word data division 45 are included (drawing 6)) memorized by the User Information storage means 16 using given Key-Word, and searches for User Information which is in agreement with Key-Word (S102).

[0051] Next, the User Information acquisition means 17 gives User Information which is in agreement with Key-Word to the are recording level decision means 12 as a parameter of an are recording data decision function, and the date management tool 18 gives a current date to the are recording level decision means 12 as a parameter of an are recording data decision function. Furthermore, the empty capacity acquisition means 19 investigates the empty capacity of the are recording preservation means 14 as a storage, and gives empty capacity to the are recording level decision means 12 as a parameter of an are recording data function (S103).

[0052] Next, the are recording level decision means 12 is an are recording data decision function (a stage function table and an amount-of-information function table (drawing 10 (a), drawing 10 (b))) to the item of classification data 30b of the data attribute data given from the receiving means 10, and Key-Word data-division 30c. The information (are recording level value) which shows which part of the received data is accumulated is searched for by acquiring from the function storage means 11 and giving the parameter of User Information, a date, and empty capacity to an are recording data decision function (S104).

[0053] When the are-recording level value which can be found from an are-recording data decision function is not "0", i.e., when accumulating some received data [at

least] in the are-recording preservation means 14, a part or the whole of received data with which the are-recording level on which Yes) and the are-recording level decision means 12 can be found from an are-recording data decision function gave the data-extraction means 13, and the data-extraction means 13 received it from a receiving means 10 extracts based on are-recording level by (S 105 (S106). In addition, processing is ended without carrying out are recording preservation of received data to No) and the are recording preservation means 14 by (S105, when an are recording level value is "0."

[0054] Next, the data extraction means 13 gives the extract data picked out from received data based on are recording level to the data write-in means 15, and the data write-in means 15 writes extract data in the are recording preservation means 14, and it performs are recording preservation (S107).

[0055] Thus, with the procedure of step S101 to the step S107, receiving set 1A carries out are recording preservation of some or all of data that was received at the are recording preservation means 14.

[0056] Drawing 12 and drawing 13 are flow charts which show the procedure with which the are recording level decision means 12 determines the part which gives the date when receiving the empty capacity of the storage which carries out are recording preservation of the received data, and data, the data attribute of received data, and User Information of the user who peruses the received data, and carries out are recording preservation of the received data as an are recording data function as a parameter.

[0057] A sending set 2 transmits the data shown in drawing 7 and drawing 8 (b), receives this data with the receiving means 10 of a receiving set 1, and memorizes for the are recording preservation means 14.

[0058] Moreover, User Information of the content shown in drawing 6 is beforehand memorized by the User Information storage means 16.

[0059] The are recording level decision means 12 gives each of Key-Word contained in a part for the Key-Word data division of reception and data attribute data in the data attribute data 30 (drawing 8 (b)) of received data from the receiving means 10 to the User Information acquisition means 17. The User Information acquisition means 17 searches whether there is Key-Word which is in agreement with the item (the Key-Word data division 45 are included (drawing 6)) memorized by User Information about each of given Key-Word, and when there is an item ("Biel" is in agreement in the case of the example of drawing 8 (b) and drawing 6) of User Information which is in agreement with Key-Word, it gives the User Information to the are recording level decision means 12.

[0060] The are recording level decision means 12 receives the empty capacity other than User Information from the data attribute data from a receiving means, the date data from the date management tool 17, and the empty capacity acquisition means 19

as a parameter of an are recording data decision function, respectively.

[0061] It is drawing 14 which made the table the example of each parameter given to the are recording level decision means 12. When the item which is in agreement with Key-Word of Key-Word data-division 30c of the data attribute data 30 does not exist in the item of User Information containing the Key-Word data division 45, User Information is not given as a parameter. It explains below as that by which each parameter of drawing 14 is given to the are recording level decision means 12.

[0062] As shown in drawing 12 , the are recording level decision means 12 Amount-of-information data-division 30a (drawing 8 (b)) of the data attribute data 30 is referred to, and it is the maximum (in the example of drawing 8 (b)) of the are recording level value of received data. Register L-Max in which is asked for the are recording level value of the are recording level 4 "4" from are recording level 1, and the are recording level decision means 12 has the value (in expressing the value saved at the register, in the example of drawing 8 (b), referred to as L-Max=4 using a register name.) the following -- the same . It saves (S111).

[0063] Next, the empty capacity received from the empty capacity acquisition means 19 is saved at register V-Max as maximum capacity of the data in which are recording preservation is possible (S112).

[0064] The are recording level decision means 12 acquires the "catalog" which is classification data 30b, and "Biel" which is Key-Word of Key-Word data-division 30c from the data attribute data 30, and chooses and acquires the stage function table shown in drawing 10 (a), and the amount-of-information function table shown in drawing 10 (b) from the function storage means 11 as an are recording data decision function which determines an are recording level value (S113). The stage function table of drawing 10 (a) is a function which calculates the candidate value of are recording level by making into a parameter the date in receiving set 1A given from the date management tool 18, and the amount-of-information function table of drawing 10 (b) is a function which calculates the rule-of-thumb value of are recording level by making into a parameter empty capacity of the are recording preservation means 14 given from the empty capacity management tool 19.

[0065] The "catalog" of classification data 30b, and the stage function table chosen from Key-Word "Biel" It consists of tables which combined the moon item 36 from January to December, and the are recording level value item 37 as shown in drawing 10 (a). If it will apply in August from June of summer when it will be expected that the need of Biel becomes high, a high are recording level value "4" is set up, and low are recording level value "1" - "3" is set up from June in the moons other than August.

[0066] As the amount-of-information function table chosen from the "catalog" of classification data 30b, and the number of the are-recording level set as amount-of-information data-division 30a (equal to L-Max) is shown in drawing 10 (b), it consists of tables which combined the empty capacity item 38 and the

are-recording level value item 39 classified into the phase for several minutes of are-recording level, and an are-recording level value with a higher partition with a larger empty capacity is set up.

[0067] First, the are recording level decision means 12 searches a stage function table based on the date, and calculates the candidate value of are recording level (S114). Since the date parameter is "1999/11/23" as shown in drawing 14 , as a result of retrieval of a stage function table, the are recording level value "2" set as the are recording level value item 37 corresponding to November of the moon item 36 can be found as a candidate value of are recording level, and this value is saved at the register X of the are recording level decision means 12 (S115).

[0068] Since the item which is in agreement with Key-Word contained in the data attribute data 30 exists in the item of User Information (it is Yes at S016), "adjustment processing of the are recording level value X" which reflects User Information to the value of the candidate value X of are recording level is performed (S117).

[0069] "Adjustment processing of the are recording level value X" of step S117 is explained using drawing 13 . It is shown that the information included in the data which it received that the item which is in agreement with Key-Word contained in the data attribute data 30 exists in the item of User Information is an interested content for a user. Then, 2 ****s "2" of the values of the candidate value X of are recording level are carried out, and it is referred to as "4", and in the case of the candidate value of the are recording level called for on the time-function table, it adjusts so that are recording preservation of many amounts of data may be carried out rather than the amount of data by which are recording preservation is carried out at the are recording preservation means 14 (S131). However, since there is an upper limit in an are recording level value, when the value of the candidate value X of are recording level turns into a larger value than maximum L-Max of are recording level by carrying out increment adjustment, the candidate value X of Yes) and are recording level is made into maximum L-Max of are recording level by (S123 (S133). In below maximum L-Max of are recording level, the value of the candidate value X of the are recording level which carried out increment adjustment ends No) and "adjustment processing of the are recording level value X" by (S123.

[0070] A rule-of-thumb value how suitable [after "adjustment processing of the are recording level value X" is completed / the amount of information of the data which the are recording level decision means 12 searches an amount-of-information function table (drawing 10 (b)) based on empty capacity next, and carry out are recording preservation] to the empty capacity of the are recording preservation means 14 as shown in drawing 12 is calculated (S118). Since an empty capacity parameter is "2M (cutting tool)" as shown in the parameter table of drawing 14 , as a result of retrieval of an amount-of-information function table (drawing 10 (b)), the

value "3" set as the are recording level value item 39 corresponding to the partition 38 of the amount-of-information item below more than 1M5M can be found as a rule-of-thumb value of are recording level, and this value is saved at the register Y of the are recording level decision means 12 (S119).

[0071] Next, the comparison with V-Max which is the amount of information of the data stored when an are recording level value is X, and the empty capacity of the are recording preservation means 14 is performed (S120). Since the candidate value X of are recording level is "4" as a result of carrying out increment adjustment, the amount of information of the data stored from the are recording level 4 of amount-of-information data-division 30a of drawing 8 (b) when an are recording level value is X is "1M (cutting tool)." Moreover, the empty capacity of the are recording preservation means 14 is "2M (cutting tool) from drawing 14 .

[0072] Since data cannot be stored in the are recording preservation means 14 when the amount of information of the data stored when an are recording level value is X is larger than empty capacity V-Max, the decrement of X is performed until empty capacity V-Max and the amount of information of the data stored when an are recording level value is X become equal (S122). However, in the process of a decrement, when the candidate value X of are recording level is set to "1", the value of the candidate value X of Yes) and are recording level is set to "0" by (S121 (S123), and the value of X is outputted as an are recording level value (S124).

[0073] In beyond the amount of information "1M (cutting tool)" of the data which empty capacity V-Max "2M (cutting tool)" stores like the example shown in drawing 14 and drawing 8 (b) when an are recording level value is X ("4"), it checks whether there has been any coincidence of Key-Word (S125).

[0074] When there is coincidence of Key-Word like the example shown in drawing 6 and drawing 8 (b) (it sets for an example and is "Biel"), even if the candidate value X of are recording level "4" is larger than rule-of-thumb value [of are recording level] Y "3", the value of X is outputted as an are recording level value (S124).

[0075] When there is no coincidence of Key-Word, the decrement of X is performed until it compares the candidate value X of are recording level "4" with rule-of-thumb value [of are recording level] Y "3", and the candidate value X of Yes) and are recording level becomes equal to the rule-of-thumb value Y of are recording level by (S126, when the candidate value X of are recording level is larger than the rule-of-thumb value Y of are recording level (S127).

[0076] In below the rule-of-thumb value Y of are recording level, the candidate value X of are recording level outputs the value of No) and X as an are recording level value by (S126 (S124).

[0077] With the above procedure, the are recording level decision means 12 calculates the value of are recording level, and gives it to the data extraction means 13. After the value of are recording level is given to the data extraction means 13, a procedure until

are recording preservation of the extract data extracted from received data is carried out at the are recording preservation means 14 is as having mentioned above using the flow chart of drawing 11 .

[0078] Since User Information of a proper is taken into consideration to the user who faces determining a part for the data division which carries out are recording preservation (are recording level) as an are recording preservation means from received data, and includes a user's hobby, interest, taste, etc. according to receiving set 1A constituted as mentioned above Since much information can be saved about required data and amount of information can be suppressed and saved for a user especially about the information which is not required, it is possible to use the are recording preservation means 14 effectively, raising a user's satisfaction level.

[0079] The receiving set of the gestalt of implementation of the 3rd of invention concerning this invention is a receiving set which carries out are recording preservation of a part or the whole of data which received at the storage in which it was prepared inside the receiving set.

[0080] (Gestalt of the 3rd operation) Although the receiving set of the gestalt of the 3rd operation is almost the same as receiving set 1A of the gestalt of the 2nd operation, the storage in which which part of the received data was prepared inside the receiving set is faced whether are recording preservation is carried out determining, and the places which use the taste degree-of-concentration flag 46 differ further. The receiving set of the gestalt of the 3rd operation is set to "receiving set 1B." The hobby of the user who peruses the data received by receiving set 1B, interest, and taste are the information which shows the fraction, concentrating, a large number, or whether it is distributing, and the taste degree-of-concentration flag 46 is held in User Information, as shown in drawing 15 .

[0081] The taste degree-of-concentration flag 46 holds one numeric value of 1 to 3, and is determined based on the number of Key-Word set as the Key-Word data division 45 by the user at the time of setting out of the Key-Word data division 45 by the user, or updating.

[0082] In the case of 1 to 3, the number of Key-Word sets the value of the taste degree-of-concentration flag 46 to "3", in the case of 4 to 10, the number of Key-Word sets the value of the taste degree-of-concentration flag 46 to "2", and when the number of Key-Word is 11 or more, the value of the taste degree-of-concentration flag 46 is set to "1." Therefore, concentrating on a user's hobby, interest, and the object of specification [taste] is shown, so that the value of the taste degree-of-concentration flag 46 is large. However, the range of the value which the taste degree-of-concentration flag 46 takes, and the setting-out approach of a value are not restricted to this example.

[0083] The configuration of others of receiving set 1B is the same as the configuration of receiving set 1A in the gestalt of the 2nd operation shown in drawing

9 , and the same as the configuration in the gestalt of the 2nd operation which also shows the configuration of received data to drawing 7 and drawing 8 (b). Furthermore, it is the stage function table and amount-of-information function table also showing the function table as an are recording data decision function used with the are recording level decision means 12 in drawing 10 (a) and drawing 10 (b).

[0084] In receiving set 1B, the are recording level decision means 12 explains the procedure of giving the parameter containing the taste degree-of-concentration flag 46 to an are recording data decision function, and determining an are recording level value, using the flow chart shown in drawing 16 and drawing 17 . In addition, in the gestalt of this operation, the parameter which the are recording level decision means 12 gives to an are recording data decision function is as being shown in drawing 18 .

[0085] A sending set 2 transmits the data shown in drawing 7 and drawing 8 (b), receives this data with the receiving means 10 of receiving set 1B, and memorizes for the are recording preservation means 14.

[0086] Moreover, the data shown in drawing 15 as User Information are beforehand memorized by the User Information storage means 16. A user's interest included in User Information as mentioned above, the hobby, and the taste degree-of-concentration flag 46 which shows the degree of concentration of taste are contained in this User Information.

[0087] The are recording level decision means 12 gives each of Key-Word contained in Key-Word data-division 30c of reception and data attribute data in the data attribute data (drawing 8 (b)) of received data from the receiving means 10 to the User Information acquisition means 17. The User Information acquisition means 17 confirms whether there is Key-Word which is in agreement with the item (the Key-Word data division 45 are included (drawing 15)) memorized by User Information about each of given Key-Word. While the User Information acquisition means 17 gives the taste degree-of-concentration flag 46 to the are recording level decision means 12, when there is an item of User Information which is in agreement with Key-Word of Key-Word data-division 30c of the data attribute data 30, it gives the User Information to the are recording level decision means 12. In the case of the example shown in drawing 8 (b) and drawing 15 , "Biel" serves as User Information which is in agreement with Key-word.

[0088] The are recording level decision means 12 receives the empty capacity other than User Information which is in agreement with Key-word, and the taste degree-of-concentration flag 46 as a parameter of an are recording data decision function, respectively from the data attribute data from a receiving means, the date data from the date management tool 17, and the empty capacity acquisition means 19. In addition, when the item which is in agreement with Key-Word of Key-Word data-division 30c of the data attribute data 30 does not exist in the item of User Information containing the Key-Word data division 45, User Information given as a

parameter serves as only the taste degree-of-concentration flag 46.

[0089] As shown in drawing 16 , the are recording level decision means 12 Amount-of-information data-division 30a (drawing 8 (b)) of the data attribute data 30 is referred to, and it is the maximum (in the example of drawing 8 (b)) of the are recording level value of received data. the are recording level value of are recording level 1 to the are recording level 4 "4" -- it is -- register L-Max (in expressing the value saved at the register, in the example of drawing 8 (b), referred to as L-Max=4 using a register name.) in which is asked and the function processing processing means 12 has the value the following -- the same . It saves (S211).

[0090] Next, the empty capacity received from the empty capacity acquisition means 19 is saved at register V-Max as maximum capacity of the data in which are recording preservation is possible (S212).

[0091] The are recording level decision means 12 chooses and acquires the amount-of-information function table indicated to be the "catalog" which is classification data 30b, and the stage function table which acquires "Biel" which is Key-Word of Key-Word data-division 30c, and is shown in drawing 10 (a) from the function storage means 11 to drawing 10 (b) from the data attribute data 30 (S213). The detail of a stage function table and an amount-of-information function table is as the gestalt of the 2nd operation having described.

[0092] First, the are recording level decision means 12 searches a stage function table based on the date, and calculates the candidate value of are recording level (S214). Since the date parameter is "1999/11/23" as shown in drawing 18 , as a result of retrieval of a stage function table, the are recording level value "2" set up in November can be found as a candidate value of are recording level, and this value is saved at the register X of the are recording level decision means 12 (S215).

[0093] Since the item which is in agreement with Key-Word contained in the data attribute data 30 exists in the item of User Information (it is Yes at S216), "adjustment processing of the are recording level value X" based on the taste degree-of-concentration flag 46 is performed to the value of the candidate value X of are recording level (S217).

[0094] "Adjustment processing of the are recording level value X" of step S217 is explained using drawing 17 . When the value of the taste degree-of-concentration flag 46 is "3" (it is Yes at S231) Since it can judge that "Biel" is one in the interested matter restricted for the user Increment adjustment of the are recording level value is carried out for the value of the candidate value X of are recording level (it is "2" set up in November in the example) as L-Max (in an example, it is "4") at maximum (S232). In addition, when the value of the taste degree-of-concentration flag 46 is "2" (it is Yes at S233), 2 ****s of the values of the candidate value X of are recording level are carried out (S234), and when the value of the taste degree-of-concentration flag 46 is "1" (it is No at S233), 1 **** of the values of the candidate value X of are recording

level is carried out (S235). Furthermore, when the candidate value X of are recording level is larger than maximum L-Max of are recording level, the candidate value X of Yes) and are recording level is made into maximum L-Max of are recording level by (S236 (S232), and "adjustment processing of the are recording level value X" is ended.

[0095] After "adjustment processing of the are recording level value X" is completed, as it is shown in drawing 16 , the are recording level decision means 12 searches an amount-of-information function table based on empty capacity next, and the rule-of-thumb value of the are recording level to empty capacity is calculated (S218). Since an empty capacity parameter is "2M (cutting tool)" as shown in the parameter table of drawing 18 , as a result of retrieval of an amount-of-information function table (drawing 10 (b)), the value "3" set as the are recording level value item 39 corresponding to the partition below more than 1M5M of the empty capacity item 38 can be found as a rule-of-thumb value of are recording level, and saves this value at the register Y of the are recording level decision means 12 (S219).

[0096] Next, the comparison with V-Max which is the amount of information of the data stored when an are recording level value is X, and the empty capacity of the are recording preservation means 14 is performed (S220). Since the candidate value X of are recording level is "4" as a result of carrying out increment adjustment, the amount of information of the data stored from the are recording level 4 of amount-of-information data-division 30a of drawing 8 (b) when an are recording level value is X is "1M (cutting tool)." Moreover, the empty capacity of the are recording preservation means 14 is "2M (cutting tool) from drawing 14 .

[0097] Since data cannot be stored in the are recording preservation means 14 when the amount of information of the data stored when an are recording level value is X is larger than empty capacity V-Max, the decrement of X is performed until empty capacity V-Max and the amount of information of the data stored when an are recording level value is X become equal (S222). However, in the process of a decrement, when the candidate value X of are recording level is set to "1", the value of the candidate value X of Yes) and are recording level is set to "0" by (S221 (S223), and the value of X is outputted as an are recording level value (S224).

[0098] In beyond the amount of information "1M (cutting tool)" of the data which empty capacity V-Max "2M (cutting tool)" stores like an example when an are recording level value is X, it checks whether there has been any coincidence of Key-Word (S225).

[0099] When there is coincidence of Key-Word like an example (it sets for an example and is "Biel"), even if the candidate value X of are recording level "4" is larger than rule-of-thumb value [of are recording level] Y "3", the value of X is outputted as an are recording level value (S224).

[0100] When there is no coincidence of Key-Word, the candidate value X of are recording level is compared with the rule-of-thumb value Y of are recording level, and

when the candidate value X of are recording level is larger than the rule-of-thumb value Y of are recording level, the decrement of X is performed until the candidate value X of Yes) and are recording level becomes equal to the rule-of-thumb value Y of are recording level by (S226 (S227).

[0101] In below the rule-of-thumb value Y of are recording level, the candidate value X of are recording level checks the value of No) and the taste degree-of-concentration flag 46 by (S226, and when the value of the taste degree-of-concentration flag 46 is not "3", the value of No) and X is outputted as an are recording level value by (S228 (S224).

[0102] When the value of the taste degree-of-concentration flag 46 is "3", by (S228 Yes), A user's interest, a hobby, and taste are concentrating on the specific object. The information on received data ("Biel") in spite of not being important for a user (Key_Wor not being in agreement) Since the candidate value X of are recording level is over the rule-of-thumb value Y of are recording level, the value of the candidate value X of the are recording level which made reduction correction (S229) is outputted as an are recording level value (S224).

[0103] With the above procedure, the are recording level decision means 12 calculates the value of are recording level, and gives it to the data extraction means 13. After the value of are recording level is given to the data extraction means 13, a procedure until are recording preservation of the extract data extracted from received data is carried out at the are recording preservation means 14 is as the gestalt of the 2nd operation having explained using the flow chart of drawing 11 .

[0104] According to the receiving set of the above configurations, the are recording preservation means 14 of the received data is faced at the decision for data division (are recording level) which carries out are recording preservation. Since a user's hobby, interest, and the taste degree-of-concentration flag 46 that shows whether a bias is in taste are used Since increment correction and reduction revision of are recording level can be made more reflecting a user's property in case adjustment processing of are recording level is performed based on User Information, are recording preservation of data which raise a user's satisfaction level further is attained.

[0105] the gestalt of operation of this invention can be boiled not only in an above-mentioned gestalt but variously, can be changed, and can be carried out. for example, in case are recording level is determined, the are recording level decision means 12 as a parameter given to an are recording data decision function Although three gestalten of "empty capacity, a data attribute", "empty capacity, a data attribute, a date, and User Information (the taste degree-of-concentration flag 46 is not included)", and "empty capacity, a data attribute, a date, and User Information (the taste degree-of-concentration flag 46 is included)" were mentioned The combination of other parameters is also possible, for example, "the date and a data

attribute" can also be made into a parameter.

[0106] Moreover, it sets in the gestalt of the 2nd and the 3rd operation. As each data item (title data, text data, voice data, image data) included in received data was shown in drawing 7 "The title data 31 (are recording level 1)", "the title data 31 and text data 32 (are recording level 2)", "the title data 31, text data 32 and voice data 33 (are recording level 3)", and "the title data 31, text data 32, voice data 33 and the image data 34 (are recording level 4)" -- as -- it is accumulated in the combination of a data item. It changes to this, judges whether are recording preservation is carried out for every data item, and you may make it save. A user may be made to have the information which [of text data, voice data, and the image data] is liked more, in User Information especially in this case as a means which tells information.

[0107] Furthermore, as classification data contain two or more data, they may enable it to choose a finer are recording data decision function from two or more classification data.

[0108] Moreover, although it set User Information and the are recording preservation means 14 of data to one at a time, respectively, two or more User Information corresponding to two or more users is identified by the user-identification child 40 (drawing 6 , drawing 15), and it may be made to carry out are recording preservation at the are recording preservation means established for every user.

[0109] Furthermore, although the value of the empty capacity made into a parameter was made into the empty capacity of the are recording preservation means 14 in the event of a receiving set receiving data, you may make it update the value of the empty capacity made into a parameter whenever it carries out are recording preservation of the extract data at the are recording preservation means 14, in receiving two or more data.

[0110] moreover, various the adjustment approaches of an are recording level candidate value using the value of User Information and the taste degree-of-concentration flag 46 can also be boiled and changed, for example, you may change into every [of received data] classification (classification data 30b of the data attribute data 30 (drawing 8 (b))).

[0111] furthermore, the data which memorize various function tables to the storage with which a sending set is equipped, and are memorized by the are-recording preservation means 14 of a receiving set although the function table as an are-recording data decision function took the gestalt beforehand saved for the function storage means 11 -- or a function table can be independently transmitted to a receiving set, and it can also consider as the gestalt to which an are-recording level decision means saves this function table for the function storage means 11.

[0112] Moreover, although there is no limit also about the setting-out approach of User Information, it is desirable that a user can do an addition and modification of User Information suitably.

[0113] Furthermore, although coincidence with Key-Word of Key-Word data-division 30c contained in the data attribute data 30 of received data and the item included in User Information (the Key-Word data division 45 are included) was considered as full coincidence, you may make it consider that it is in agreement also when there is a "drink" with which Key-Word by the side of the data attribute data 30 includes "Biel" in "Biel" in the item included in User Information.

[0114] Moreover, the function with which the receiving set of the gestalt of each 3rd operation is equipped from the 1st may be realized by the program, and this program may be stored in the record medium which can be read by computer. The case where this invention is carried out is shown in the schematic diagram of drawing 19 by using the storage with which the program which realizes the function with which a receiving set is equipped was memorized with a personal computer (PC). With the gestalt of this operation, it is the body 61 of PC, or the receiving set equipped with the monitor 62 further connected to the body 61 of PC, and the add-in board 63 for reception is attached in the body 61 of PC. The body 61 of PC functions as a receiving set by reading into this body 61 of PC the program which realizes the function of the receiving set memorized by the flexible disk 64 as a storage, and controlling the body 61 of PC, and the add-in board 63 for reception by this program.

[0115] Furthermore, the are recording level decision means 12 gives an are recording data decision function by making only empty capacity of the are recording preservation means 14 into a parameter, and you may make it determine a part for the data division which carries out are recording preservation as the are recording preservation means 14 of the received data. in this case -- for example, when it is given by the means which the rule-of-thumb information used as the rule of thumb of the amount of information for every data item of received data as shown in drawing 20 does not illustrate and the are-recording level decision means 12 gives empty capacity to an are-recording data decision function, the data item which carries out are-recording preservation is determined as an are-recording preservation means 14 as that of the basis in which each data item of received data has the amount of information shown in rule-of-thumb information. When the empty capacity of the are recording preservation means 14 is "3 M bytes", are recording preservation of the 3 data items of "title data, text data, and voice data" is specifically carried out, and when empty capacity is "100 K bytes", are recording preservation of the 2 data items of "title data and text data" is carried out.

[0116]

[Effect of the Invention] As mentioned above, according to the receiving set of this invention, it sets to the receiving set which extracts some or all of received data and carries out are recording preservation at a storage. Since a part for the data division extracted from received data is determined based on the empty capacity of a storage in order to memorize to a storage Although it cannot save since required data are not

settled in empty capacity, or there is empty capacity of enough, it cannot say that only inadequate data are saved and the capacity of a storage can be utilized effectively.

[0117] Moreover, since information detailed about data required for a user is saved since the information on a proper is taken into consideration to a user including a user's hobby, interest, taste, etc. on the occasion of the decision for the data division extracted from received data in order to memorize to a storage, and amount of information is suppressed and saved especially about the information which is not required, a deployment of a storage is possible, raising a user's satisfaction level.

[0118] Furthermore, since the date at the time of reception of data is taken into consideration on the occasion of the decision for the data division extracted from received data in order to memorize to a storage, in view of the content, and the season and stage of received data, more detailed information can be saved about timely data.

[0119] Moreover, since raising and reduction of the amount of data can be performed more reflecting a user's property in case adjustment processing of the amount of data memorized based on User Information is performed, since it becomes possible to reflect whether a bias is in a user's hobby, interest, and taste on the occasion of the decision for the data division stored in the storage of the received data, a data storage which raises a user's satisfaction level further is possible.

DESCRIPTION OF DRAWINGS

[Brief Description of the Drawings]

[Drawing 1] The block diagram showing the outline of the receiving set of the gestalt of operation of the 1st of this invention.

[Drawing 2] The block diagram of the received data which the receiving set of drawing 1 receives.

[Drawing 3] For (a), in drawing showing the data attribute data with which the received data of drawing 2 are equipped, (b) is drawing showing the configuration item of data attribute data, and drawing showing the example of the configuration item of data attribute data.

[Drawing 4] Drawing of the amount-of-information function table which calculates the rule-of-thumb value of are recording level with the table function as an are recording data decision function based on the empty capacity of a storage.

[Drawing 5] The flow chart which showed the procedure after receiving data until it carries out are recording preservation of the data to the storage in the receiving set of drawing 1 .

[Drawing 6] The block diagram of User Information in the gestalt of the 2nd operation.
[Drawing 7] The 2nd and the block diagram of the received data in the gestalt of the 3rd operation.
[Drawing 8] For (a), in drawing showing the data attribute data with which the received data of drawing 7 are equipped, (b) is drawing showing the configuration item of data attribute data, and drawing showing the example of the configuration item of data attribute data.
[Drawing 9] The block diagram showing the outline of the receiving set of the gestalt of the 2nd and the 3rd operation
[Drawing 10] For (a), in drawing of the table function as an are recording data decision function, drawing of the stage function table which calculates the candidate value of are recording level based on the moon concerned, and (b) are drawing of the amount-of-information function table which calculates the rule-of-thumb value of are recording level based on the empty capacity of a storage.
[Drawing 11] The flow chart which showed the procedure after receiving data until it carries out are recording preservation of the data to the storage in the receiving set of the receiving set of the gestalt of the 2nd and the 3rd operation.
[Drawing 12] The flow chart which shows the procedure in which an are recording level decision means determines a part for the data division which carries out are recording preservation as the are recording preservation means of the received data in the gestalt of the 2nd operation.
[Drawing 13] The flow chart which shows the procedure of adjustment processing of the are recording level value X in the gestalt of the 2nd operation.
[Drawing 14] The table showing the parameter of the are recording data decision function in the gestalt of the 2nd operation.
[Drawing 15] The block diagram of User Information in the gestalt of the 3rd operation.
[Drawing 16] The flow chart which shows the procedure in which an are recording level decision means determines a part for the data division which carries out are recording preservation as the are recording preservation means of the received data in the gestalt of the 3rd operation.
[Drawing 17] The flow chart which shows the procedure of adjustment processing of the are recording level value X in the gestalt of the 3rd operation.
[Drawing 18] The table showing the parameter of the are recording data decision function in the gestalt of the 3rd operation.
[Drawing 19] Drawing showing the outline in the case of realizing this invention using PC.
[Drawing 20] Drawing showing the rule-of-thumb amount of information for every item of received data.
[Description of Notations]
1 1A Receiving set

2 Sending Set
2a Storage means (storage)
10 Receiving Means
11 Function Storage Means
12 Are Recording Level Decision Means
13 Data Extraction Means
14 Are Recording Preservation Means
15 Data Write-in Means
16 User Information Storage Means
17 User Information Acquisition Means
18 The Date Management Tool
19 Empty Capacity Acquisition Means
30 Data Attribute Data
30a Classification data
30b Key-Word data division
30c Amount-of-information data division
31 Title Data (Data Item)
32 Text Data (Data Item)
33 Voice Data (Data Item)
34 Image Data (Data Item)
36 Moon Item
37 Are Recording Level Value Item
38 Empty Capacity Item
39 Are Recording Level Value Item
40 User-Identification Child
41 Address Data
42 Age Data
43 Sex Data
44 Occupation Data
45 Key-Word Data Division
46 Taste Degree-of-Concentration Flag
51 Empty Capacity Item
52 Are Recording Level Value Item
61 Body of PC
62 Monitor
63 Extended Boat for Reception
64 Flexible Disk (Storage)